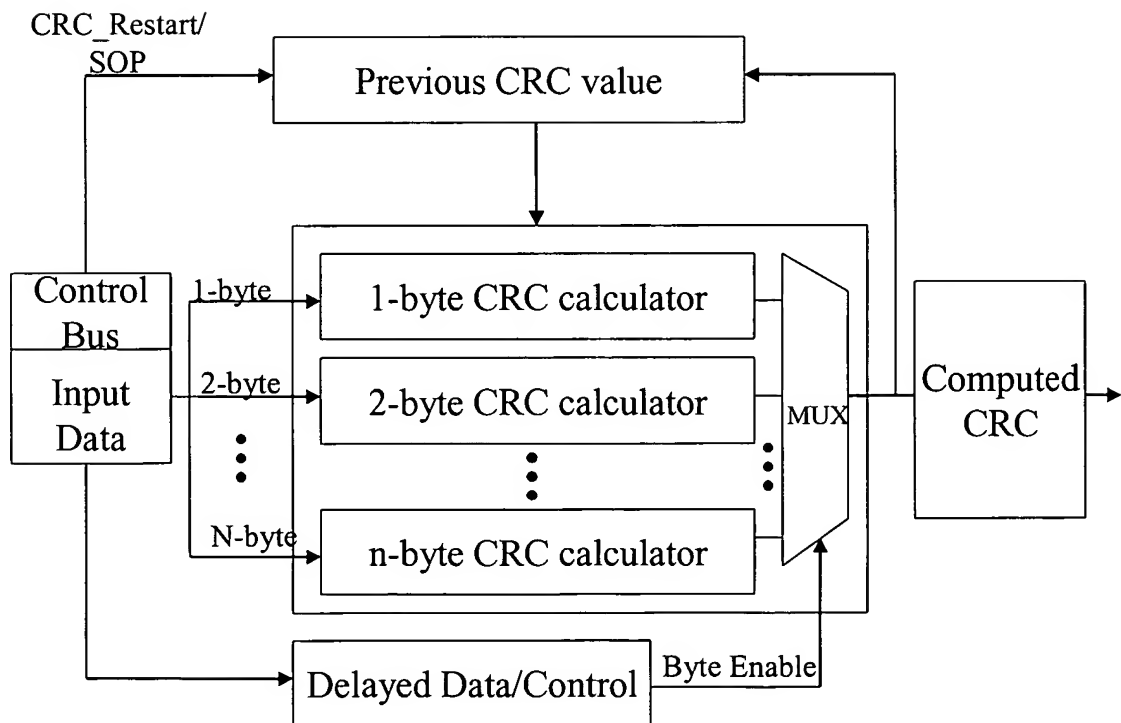
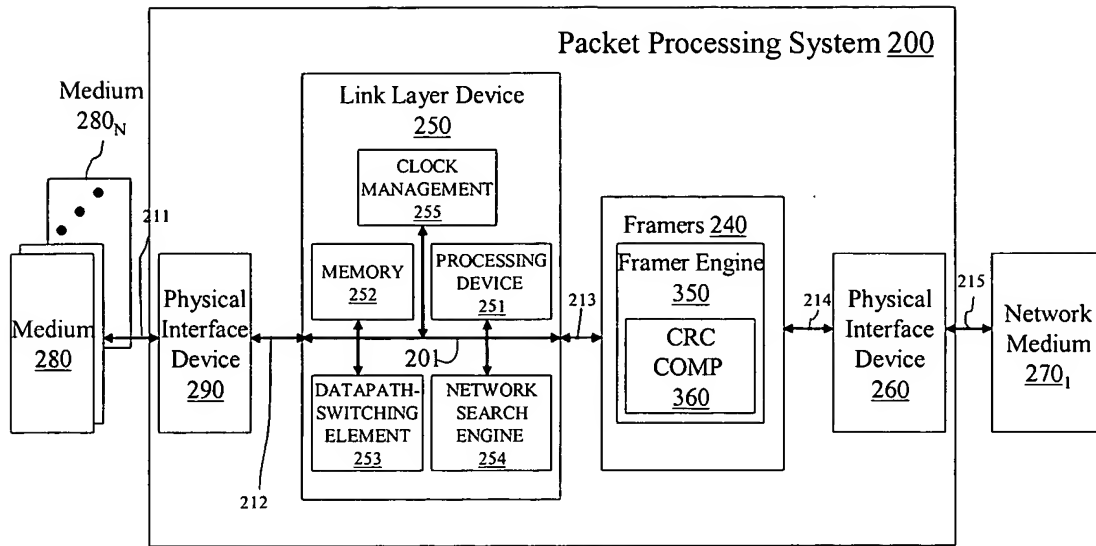


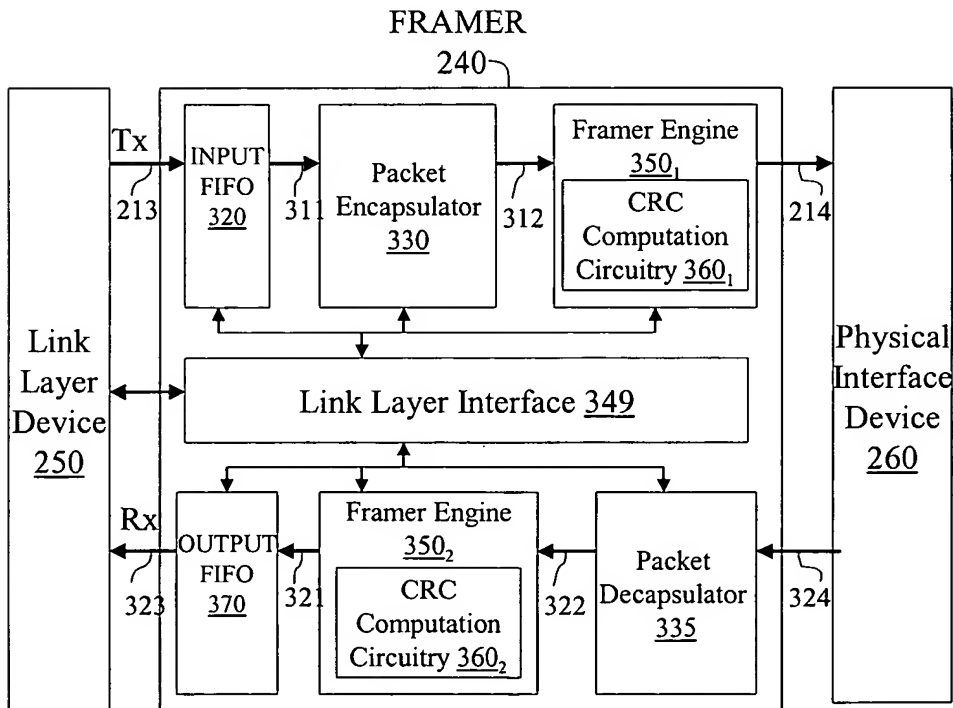
**Figure 1A**



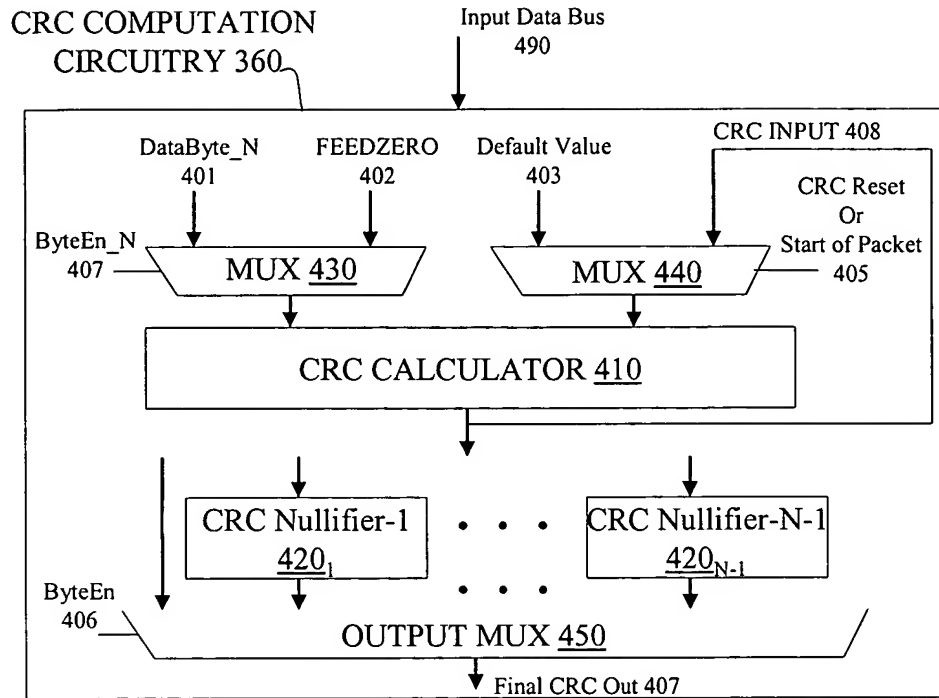
**Figure 1B**



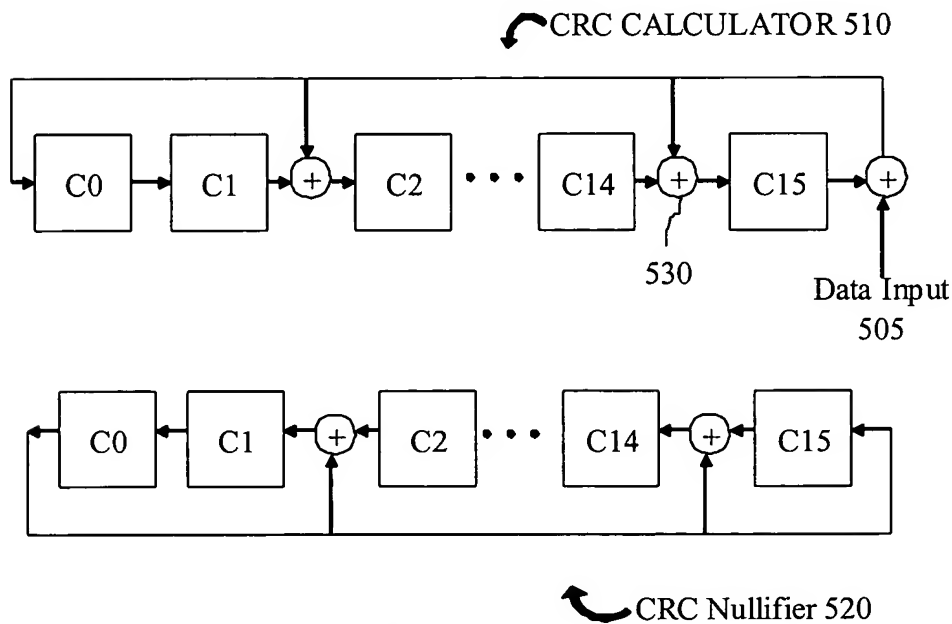
**Figure 2**



**Figure 3**



**Figure 4**



**Figure 5**

Bus Width	CRC Calculator # of XOR Gates	CRC Nullifier # of XOR Gates
128	2496	512
64	1376	576
56	1280	544
48	1056	448
40	928	512
32	800	384

**Figure 6A**

Bus Width	Architecture of Fig. 1B # of XOR Gates	Architecture of Fig. 4 # of XOR Gates
128	22,819	9,784
64	6,830	3,996
32	2,128	1,586

**Figure 6B**

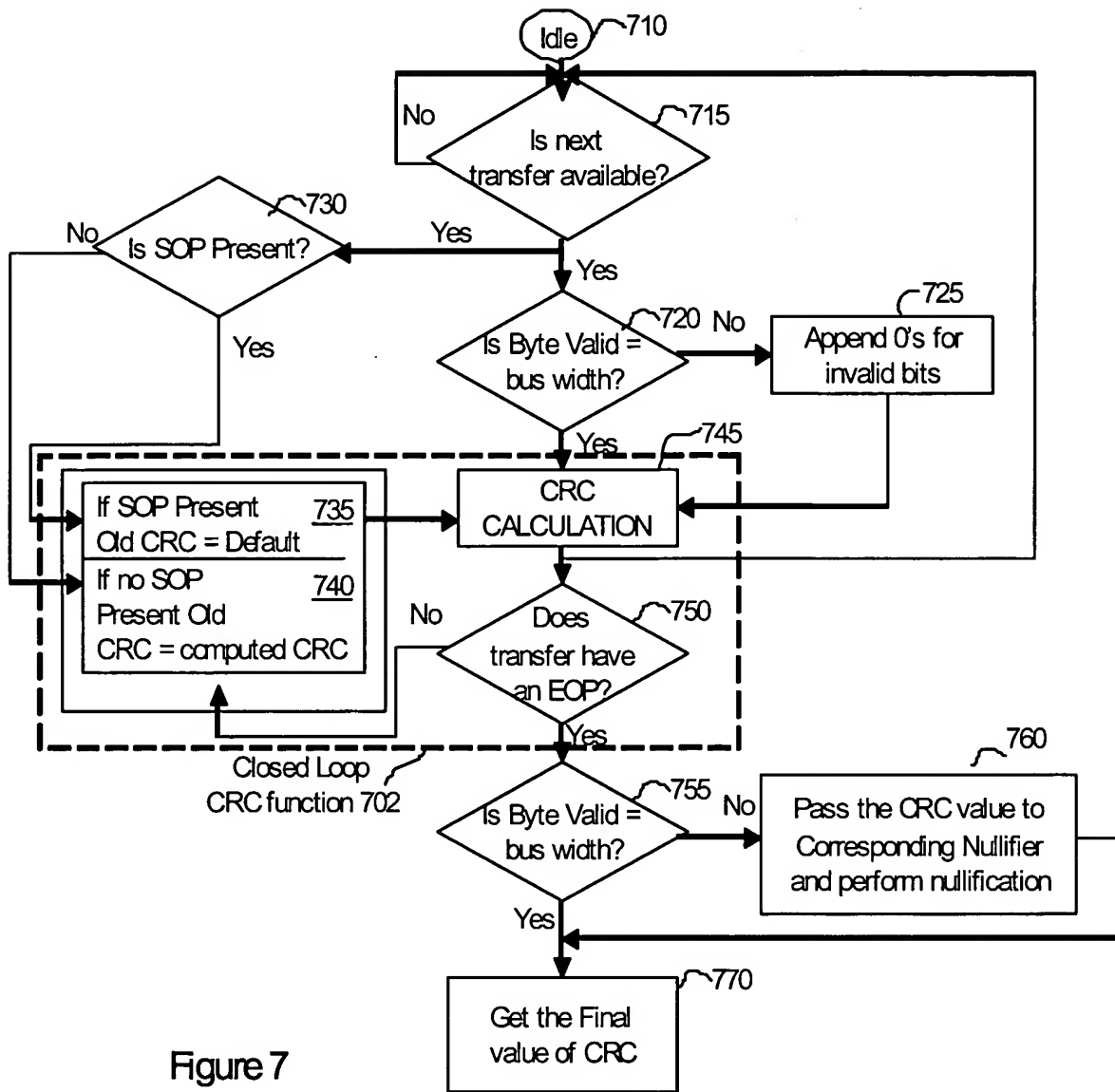


Figure 7